

Vermont Mental Health Performance Indicator Project

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani
Monica Simon

DATE: May 18, 2001

RE: Hospitalization of Substance Abuse Clients Before and After Services

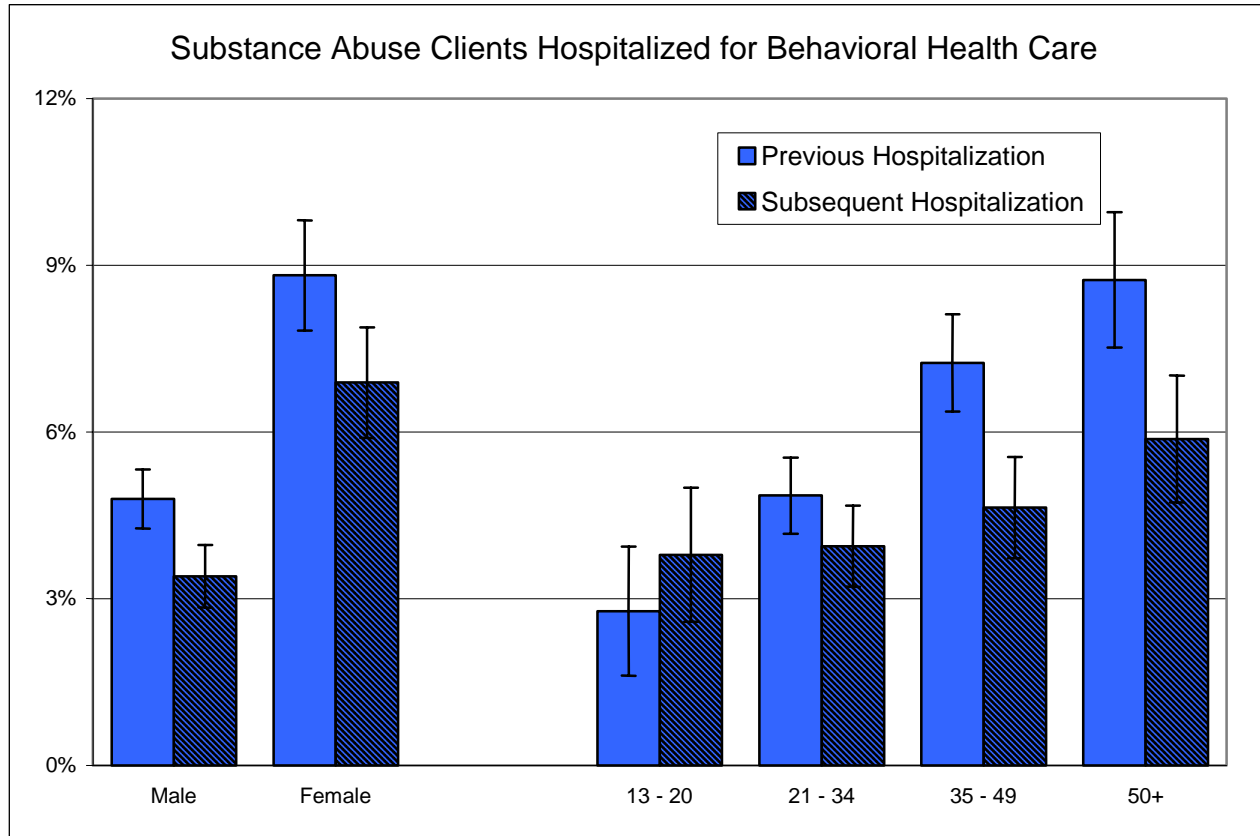
Bill Apao, Director of Public Health Statistics in the Vermont Health Department, recently requested that the Performance Indicator Project produce some outcome measures for substance abuse programs at community mental health centers in Vermont. The first analysis we conducted used the Health Department's Hospital Discharge Data Set (with the VSH and Brattleboro Retreat data sets) to investigate the relationship between community treatment for substance abuse problems and rates of hospitalization for behavioral health care before and after treatment. The results of that analysis are attached. The second analysis investigated the relationship between community treatment for substance abuse problems and the rates at which clients get into trouble with the law before and after treatment. The results of that analysis will be reported next week.

For this analysis, the data set described in last week's Performance Indicator Project report (www.state.vt.us/dmh/Data/PIPs/2001/pip051101.pdf), which includes information on all episodes of behavioral health care in the Vermont State Hospital, the Veterans Hospital in White River Junction, Vermont, the Brattleboro Retreat (the state's only private psychiatric hospital), as well as general hospitals in Vermont, New Hampshire, and neighboring counties of New York State was compared to the MSR data sets that are submitted to the state by CMHCs. The attached graph and table provide average annual hospitalization rates for the year before and the year after the year in which people received community based substance abuse treatment for fiscal years 1995 through 1998. Because the data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to derive unduplicated counts of people served across facilities.

As you will see, there were significant decreases in rates of hospitalization for behavioral health care between the year before and the year after treatment for service recipients as a whole, for men and women in treatment, and for service recipients who were 35 years of age or older. There was no change in rates of hospitalization for service recipients under 35 years of age.

As always, we welcome your questions, comments, and suggestions for further research to jpandiani@ddmhs.state.vt.us or 802-241-2638.

**CMHC Substance Abuse Clients Hospitalized for Behavioral Health Care
During the Year Before and After Treatment
Annual Averages FY 1995 - 1998**



		Four Year Averages					
		Number Served	Number Previously Hospitalized	Number Subsequently Hospitalized	Percent Previously Hospitalized	Percent Subsequently Hospitalized	P-value*
Total		4,421 ± 21	262 ± 21	194 ± 22	6% ± 0.5%	4% ± 0.5%	0.001
Gender	Male	3,171 ± 20	152 ± 17	108 ± 18	5% ± 1%	3% ± 1%	0.001
	Female	1,250 ± 8	110 ± 12	86 ± 12	9% ± 1%	7% ± 1%	0.007
Age	13 - 20	528 ± 7	15 ± 6	20 ± 6	3% ± 1%	4% ± 1%	NS
	21 - 34	1,706 ± 14	83 ± 12	67 ± 12	5% ± 1%	4% ± 1%	NS
	35 - 49	1,762 ± 14	128 ± 15	82 ± 16	7% ± 1%	5% ± 1%	0.001
	50+	424 ± 3	37 ± 5	25 ± 5	9% ± 1%	6% ± 1%	0.001

*P-value is the probability that the difference observed in the number of previous and subsequent hospitalizations is due to chance. NS indicates that the proportion is not statistically significantly different at 0.05 level of significance.

Based on analysis of Monthly Service Reports submitted to DDMHS by designated Community Service Providers, the Hospital Discharge Data Set maintained by the Vermont Health Department, and database extracts provided by the Brattleboro Retreat and Vermont State Hospital.

Because the State of Vermont does not have unique client identifiers across service providers, Probabilistic Population Estimation was used to provide unduplicated counts of people hospitalized before and after treatment (with 95% confidence intervals).